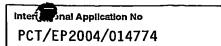
INTERNATIONAL SEARCH REPORT

			1/EP2004/014//4	
A. CLASSI IPC 7	F01D5/06	•		
According to	o International Patent Classification (IPC) or to both national classific	cation and IPC		
B. FIELDS	SEARCHED			
IPC 7	ocumentation searched (classification system followed by classifical $F01D$	tion symbols)		
Documenta	tion searched other than minimum documentation to the extent that	such documents are included	in the fields searched	
	data base consulted during the International search (name of data b	ase and, where practical, sea	ch terms used)	
EPO-In	ternal, PAJ, WPI Data			
	ENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the re	Relevant to claim No.		
Х	JP 57 193701 A (HITACHI SEISAKUS 29 November 1982 (1982-11-29) figures 2,3 & PATENT ABSTRACTS OF JAPAN vol. 007, no. 044 (M-195), 22 February 1983 (1983-02-22)	1-4,8-10		
x	& JP 57 193701 A (HITACHI SEISAK 29 November 1982 (1982-11-29) abstract JP 58 140406 A (HITACHI SEISAKUS	1-3,8-10		
	20 August 1983 (1983-08-20) figures 2,5,6	-/- -		
X Furti	her documents are listed in the continuation of box C.	X Patent family memb	ers are listed in annex.	
	ategories of died documents: ent defining the general state of the art which is not	*T* later document publishe or priority date and not	d after the international filing date in conflict with the application but	
considered to be of particular relevance		cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to		
 L document which may throw doubts on priority claim(s) or which is clied to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or 		"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "Y" document is to combined to involve an inventive step when the document is combined with one or more other such docu-		
other r	means ent published prior to the international filing date but han the priority date claimed	ments, such combination being obvious to a person skilled in the art. *&* document member of the same patent family		
Date of the	actual completion of the international search	Date of mailing of the in	emational search report	
1	3 April 2005	21/04/2005		
Name and n	mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL – 2280 HV Rijswijk	Authorized officer		
	Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Rau, G		

INTERNATIONAL SEARCH REPORT

		PC1/EP2004/014//4
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	& PATENT ABSTRACTS OF JAPAN vol. 007, no. 257 (M-256), 16 November 1983 (1983-11-16) & JP 58 140406 A (HITACHI SEISAKUSHO KK), 20 August 1983 (1983-08-20) abstract	
X	US 6 094 905 A (FUKUYAMA ET AL) 1 August 2000 (2000-08-01) column 7, line 8 - column 7, line 35	1-3,9,10
X	US 2002/124570 A1 (AKIYAMA RYOU ET AL) 12 September 2002 (2002-09-12) page 2, paragraph 23; figures 1,2	1-3,9,10
X	US 5 054 996 A (CARRENO ET AL) 8 October 1991 (1991-10-08) column 5, line 56 - column 5, line 64; figure 1	1-3,9,10
	any any any any	

INTERNATIONAL SEARCH REPORT



Patent document cited in search report		Publication date		Patent family member(s)	Publication date
JP 57193701	Α	29-11-1982	NONE		
JP 58140406	Α	20-08-1983	JP JP	1772514 C 4059442 B	14-07-1993 22-09-1992
US 6094905	A	01-08-2000	JP JP CN KR US	3621523 B2 10103004 A 1178289 A 259553 B1 6195979 B1	16-02-2005 21-04-1998 ,C 08-04-1998 15-06-2000 06-03-2001
US 2002124570	A1	12-09-2002	JP JP US CN EP US	3518447 B2 2001132476 A 2003170114 A1 1295184 A 1098067 A2 6405538 B1	15-05-2001 11-09-2003 16-05-2001
US 5054996	A	08-10-1991	CN EP JP NO	1058449 A 0468782 A2 4232335 A 912924 A	05-02-1992 29-01-1992 20-08-1992 28-01-1992